

Enoxacin: Polarographic Behaviour and its Determination in Pharmaceutical Forms

Squella,

Alvarez-Lueje,

Sturm,

Núñez-Vergara,

A differential pulse polarographic method for the identification and quantitative determination of enoxacin is described. The method is based on the electrochemical reduction of the drug at the dropping mercury electrode. It gives a well-developed polarographic response with a half-wave potential of -990 mV vs. SCE in 0.1 M HCl. The electroactive species exhibits a diffusion-controlled polarographic wave and its limiting current shows a linear dependence with the enoxacin concentration in the range between 5×10^{-4} mM and 1 mM. This characteristic is applied for determination of enoxacin in commercial tablets. The recovery study shows a good accuracy and precision for the developed assay (average of 101.1% and standard deviation of 1.99). Furthermore, a comparative UV spectrophotometric assay also is developed. © 1993, Taylor & Francis Group, LLC. All rights reserved.